

Claims:

1. Method of producing light-conducting LED bodies (20) of a material that is free-flowing before final solidification, by introduction into a mold (61-63) where the individual LED bodies (20) comprise at least one light-emitting chip (6) and at least two electrodes (1, 4) connected electrically with the chip (6) and where the free-flowing material is injected between a floor region (42) of the mold (61-63) and the chip (6), at least approximately parallel to the chip plane (7) and at least approximately normal to a plane (19) formed by two electrodes (1, 4) between the electrodes (1, 4), characterized in that

- the volumetric flow of a free-flowing material (8, 9) - at a distance (85) of the electrode plane (19) from the charging point (70) that is greater than 35% [sic] of the distance (86) between the charging point (70) and the mold side (79) of the mold (61-63) situated opposite the charging point (70) - is choked above the charging point (70) and below the chip plane (7) on the mold side (78) of the charging point (70) by at least one cross-sectional constriction (30), while
- at a distance (85) that is smaller than or equal to 35% of the distance (86) - choking takes place on the mold side (79) situated opposite the charging point (70).

2. Production method according to Claim 1, characterized in that the cross-sectional constriction (30) is produced by at least one molding element (26, 28, 32) projecting into the cavity (60) of the mold (61-63).

3. Production method according to Claim 1, characterized in that the molding element (32) is part of a slide (31), which is moved into the cavity (60) of the mold (61-63) before introduction of the free-flowing material (8, 9).

4. Production method according to Claim 3, characterized in that after preliminary filling of the mold, volumetrically reduced by the molding element (32), for final filling of the mold (61-63), with the spatial surface (33) of the molding element (32) turned toward the LED center line (18), the slide (31) is at least partially moved back to or behind the there outer contour (14) of the luminescent diode (10).

5. Production method according to Claim 3, characterized in that the slide (31), pushed in before introduction of the free-flowing material (8, 9) is continuously moved back during charging, over the entire filling operation.

6. Device for the production method according to Claim 2, characterized in that the cross-sectional constriction (30) is produced by a molding element (26, 28, 32) - viewed in the longitudinal section of the luminescent diode (10) - projecting wedge-like into the mold.

7. Device for the production method according to Claim 2, characterized in that the contour (35) of the spatial surface (33) turned toward the LED center line (18), represented in longitudinal section, encloses an angle of 5 to 45 degrees with the LED center line (18), while the point of intersection between the prolongation of the contour (35) and the LED center line (18) lies above the chip plane (7).

8. Device for the production method according to Claim 2, characterized in that the cross-sectional constriction (30) is produced by a - viewed in cross section through the luminescent diode (10) – crescent or circular arc-like molding element (26, 28, 32).

9. Device for the production method according to Claim 2, characterized in that the spatial surface (33) of the molding element (32) turned toward the LED center line (18) is a surface part of the outer contour (14) of the luminescent diode (10).

10. Device for the production method according to Claim 2, characterized in that the point of the upper edge (36) of the molding element (26, 28, 32) that comes nearest to the LED center line (18) lies on or below the chip plane (7).